

Nevada Division of Environmental Protection

Bureau of Air Pollution Control

Calendar Year 2016 Actual Production/Emission Reporting Spreadsheet for Mercury Emissions from the Precious Metals Mining Industry

Cumulative Nevada Mercury Control Program (NMCP): Mercury Operating Permit To Construct (MOPTC) Data Submittals

Pollutant ID	Production/Heat Rate	Production Units (eg. tons/yr)	Emissions Factor	Emissions Factor Units	Hg Annual Emissions (lbs/yr)	Hours Operated	Hg Co-Product (tons/yr)	Notes
Source: Newmont Mining Corporation - Twin Creeks Mine: AQOP AP1041-0723.02; MOPTC AP1041-2218								
System Description: Juniper Mill Electric Induction Furnace (S2.001/TU4.001 - 1 of 2, only one operates at a time)								
Hg	59.39	tpy	0.000106	lbs/hr	0.0445	420	0.0000	Induction Furnace emissions factor derived from 2016 M29 stack test.
System Description: Juniper Mill Electric Induction Furnace (S2.001.1/TU4.002 - 1 of 2, only one operates at a time)								
Hg	59.02	tpy	0.000168	lbs/hr	0.0699	416	0.0000	Induction Furnace emissions factor derived from 2016 M29 stack test.
System Description: Juniper Mill Carbon Kiln (S2.002/TU4.003)								
Hg	4,244.18	tpy	0.000836	lbs/hr	6.2349	7,458	0.0000	Carbon Kiln emissions factor derived from 2016 M29 stack test.
System Description: Mercury Retort Circuit #1 (S2.044/TU4.004)								
Hg	47.81	tpy	0.0000793	lbs/hr	0.0251	3,170	0.0000	Retort #1 emissions factor derived from 2016 M29 stack test.
System Description: Mercury Retort Circuit #2 (S2.045/TU4.005)								
Hg	48.29	tpy	0.0000883	lbs/hr	0.0295	3,337	0.0000	Retort #2 emissions factor derived from 2016 M29 stack test.
System Description: Sage Mill Autoclave #1 (S2.023/TU4.014)								
Hg	1,911.97	tpy	0.0000543	lbs/hr	0.4313	7,943	0.0000	Autoclave #1 emissions factor derived from 2016 M29 stack test.
System Description: Sage Mill Autoclave #2 (S2.024/TU4.015)								
Hg	1,892.21	tpy	0.0000466	lbs/hr	0.3730	8,005	0.0000	Autoclave #2 emissions factor derived from 2016 M29 stack test.
System Description: Electro-winning Cells (TU4.011 - six cells ducted to common stack)								
Hg	74.80	MMGals/yr	0.000388	lbs/hr	3.4082	8,784	0.0000	Electro-winning Cells emissions factor derived from 2016 M29 stack test.
System Description: Juniper Mill Pregnant & Barren Strip Solution Tanks (TU4.006 - TU4.008)								
Hg	80.80	MMGals/yr	0.000142	lbs/hr	1.2465	8,778	0.0000	Preg./Barren Tanks emissions factor derived from 2016 M29 stack test.
System Description: Pinon Mill Pregnant & Barren Strip Solution Tanks (TU4.012 & TU4.013)								
Hg	89.42	MMGals/yr	0.00047	lbs/hr	4.1285	8,784	0.0000	Preg./Barren Tanks emissions factor derived from 2016 M29 stack test.
System Description: Mercury Co-Product								
Hg					0.0000		10.2200	Facility-wide mercury co-product collected, no breakout by system provided.
System Description: Laboratory Sample Prep. Room, Fire Assay Room, Wet Lab Room, Slurry Prep. Room, LECO Room, Instrumentation Room, Met Lab Room & Autoclave Room								
Hg					3.9781		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:		434.3715		8.9100	CY2006 Co-product: 17,820 lbs/yr
			CY2007 Facility Total:		929.9303		13.2160	CY2007 Co-product: 26,432 lbs/yr.
			CY2008 Facility Total:		1,679.1864		8.8000	CY2008 Co-product: 17,600 lbs/yr.
			CY2009 Facility Total:		425.7559		5.9080	CY2009 Co-product: 11,816 lbs/yr.
			CY2010 Facility Total:		178.8392		5.4670	CY2010 Co-product: 10,934 lbs/yr.
			CY2011 Facility Total:		452.1731		3.9940	CY2011 Co-product: 7,988 lbs/yr.
			CY2012 Facility Total:		695.2002		4.6530	CY2012 Co-product: 9,308 lbs/yr.
			CY2013 Facility Total:		148.5169		7.7370	CY2013 Co-product: 15,474 lbs/yr.
			CY2014 Facility Total:		68.4077		10.0105	CY2014 Co-product: 20,021 lbs/yr.
			CY2015 Facility Total:		20.2603		5.2900	CY2015 Co-product: 10,580 lbs/yr.
			CY2016 Facility Total:		19.9695		10.2200	CY2016 Co-product: 20,439 lbs/yr.

Source: Jerritt Canyon Gold, LLC - Jerritt Canyon Mine (formerly Veris Gold USA, Inc./formerly Queenstake Resources USA, Inc.): AQOP AP1041-3422; MOPTC AP1041-2217								
System Description: West Roaster Process (S2.031 & S2.033/TU4.002 & TU4.002A - West Roaster & West Quench Tank)								
Hg	601,381.00	tpy	0.005945	lbs/hr	40.1823	6,759	0.0000	Roaster emissions factor derived from 2016 M29 stack test.
System Description: East Roaster Process (S2.032 & S2.034/TU4.003 & TU4.003A - East Roaster & East Quench Tank)								
Hg	630,079.00	tpy	0.009194	lbs/hr	64.3304	6,997	0.0000	Roaster emissions factor derived from 2016 M29 stack test.
System Description: Ore Dryer (S2.022/TU4.001)								
Hg	1,243,186.00	tpy	0.001453	lbs/hr	8.3853	5,771	0.0000	Ore Dryer emissions factor derived from 2016 M29 stack test.
System Description: Mercury Retort (S2.039.1/TU4.008)								
Hg	16.00	tpy	0.000396	lbs/hr	0.5702	1,440	0.0000	Retort emissions factor derived from 2016 M29 stack test.
System Description: Refining Process Induction Furnace (S2.039.2/TU4.009)								
Hg	8.00	tpy	0.0019	lbs/hr	0.2470	130	0.0000	Furnace emissions factor derived from 2016 M29 stack test.
System Description: Electro-winning Cells & Pregnant/Barren Strip Solution Tanks (S2.038.1 - S2.038.4/TU4.004 - TU4.007)								
Hg	350,400.00	gal/yr	0.001848	lbs/hr	16.1885	8,760	0.0000	EW Cells and P/B Tanks emissions factor derived from 2016 M29 stack test.
System Description: Mercury Co-Product								
Hg					0.0000		4.4500	Facility-wide mercury co-product collected, no breakout by system provided.
System Description: Laboratory Units Including Large Ore Drying Ovens (5 Units) and Electro-winning Cells								
Hg					4.2726		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
					CY2006 Facility Total: 293.9245		2.9600	CY2006 Co-product: 5,920 lbs/yr.
					CY2007 Facility Total: 1,966.3934		1.0200	CY2007 Co-product: 2,040 lbs/yr.
					CY2008 Facility Total: 219.9723		0.7100	CY2008 Co-product: 1,420 lbs/yr.
					CY2009 Facility Total: 138.9704		2.1000	CY2009 Co-product: 4,200 lbs/yr.
					CY2010 Facility Total: 34.9527		11.0380	CY2010 Co-product: 22,076 lbs/yr.
					CY2011 Facility Total: 69.8714		0.0000	CY2011 Co-product: 0.00 lbs/yr.
					CY2012 Facility Total: 29.8595		1.5200	CY2012 Co-product: 3,040 lbs/yr.
					CY2013 Facility Total: 26.6023		2.5600	CY2013 Co-product: 5,120 lbs/yr.
					CY2014 Facility Total: 13.4934		3.9820	CY2014 Co-product: 7,964 lbs/yr.
					CY2015 Facility Total: 97.0995		5.3400	CY2015 Co-product: 10,675 lbs/yr.
					CY2016 Facility Total: 134.1763		4.4500	CY2016 Co-product: 8,900 lbs/yr.

Source: Klondex Midas Operations, Inc. (formerly Newmont Midas Operations): AQOP AP1041-0766.02; OPTC AP1041-2989; MOPTC AP1041-2253								
System Description: Refinery Furnace #1 (S2.044/TU4.001)								
Hg	105.19	tpy	0.002042	lbs/hr	1.4185	695	0.0000	Furnace #1 emissions factor derived from 2016 M29 stack test.
System Description: Refinery Furnace #2 (S2.045/TU4.002)								
Hg	92.04	tpy	0.002688	lbs/hr	1.2392	461	0.0000	Furnace #2 emissions factor derived from 2016 M29 stack test.
System Description: Retort A (S2.047/TU4.003)								
Hg	56.89	tpy	0.000253	lbs/hr	0.7719	3,051	0.0000	Retort A emissions factor derived from 2016 M29 stack test.
System Description: Retort B (S2.048/TU4.004)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Retort B decommissioned in July, 2012.
System Description: Retort C (S2.052/TU4.005)								
Hg	54.01	tpy	0.000282	lbs/hr	0.8208	2,911	0.0000	Retort C emissions factor derived from 2016 M29 stack test.
System Description: Mercury Co-Product								
Hg					0.0000		0.0020	Facility-wide mercury co-product collected, no breakout by system provided.
System Description: Assay Laboratory								
Hg				lbs/hr	2.3246		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
					CY2006 Facility Total:	17.1801	0.0000	CY2006 Co-product: 0.00 lbs/yr.
					CY2007 Facility Total:	4.2457	0.0000	CY2007 Co-product: 0.00 lbs/yr.
					CY2008 Facility Total:	41.3420	0.0000	CY2008 Co-product: 0.00 lbs/yr.
					CY2009 Facility Total:	6.4395	0.0000	CY2009 Co-product: 0.00 lbs/yr.
					CY2010 Facility Total:	14.2333	0.0000	CY2010 Co-product: 0.00 lbs/yr.
					CY2011 Facility Total:	32.0815	0.0099	CY2011 Co-product: 19.87 lbs/yr.
					CY2012 Facility Total:	21.8322	0.0100	CY2012 Co-product: 10.40 lbs/yr.
					CY2013 Facility Total:	16.3548	0.0059	CY2013 Co-product: 11.90 lbs/yr.
					CY2014 Facility Total:	2.6214	0.0030	CY2014 Co-product: 5.72 lbs/yr.
					CY2015 Facility Total:	3.0071	0.0020	CY2015 Co-product: 3.96 lbs/yr.
					CY2016 Facility Total:	6.5749	0.0020	CY2016 Co-product: 3.24 lbs/yr.
Source: KG Mining (Bald Mountain), Inc - Huntington Valley/Mooney Basin (formerly Barrick, Bald Mountain Mine): AQOP AP1041-1362; MOPTC AP1041-2246								
System Description: Propane Fired Carbon Regeneration Kiln (S2.001/TU4.001)								
Hg		tpy	0	lbs/hr	0.0000	0	0.0000	Carbon Kiln decommissioned in May, 2012.
System Description: Propane Fired Mercury Retort (S2.002/TU4.002)								
Hg		tpy	0	lbs/hr	0.0000	0	0.0000	Retort decommissioned in May, 2012.
System Description: Propane Fired Bullion Furnace (S2.003/TU4.003)								
Hg		tpy	0	lbs/hr	0.0000	0	0.0000	Bullion Furnace decommissioned in May, 2012.
System Description: Electro-winning Circuit (IA1.024/TU4.004) and Barren Strip Solution Tank (TU4.005)								
Hg		gals/yr	0	lbs/hr	0.0000	0	0.0000	EW Circuit decommissioned in May, 2012.
System Description: Mercury Co-Product								
Hg					0.0000		0.0000	Facility-wide mercury co-product collected, no breakout by system provided.
System Description: Assay Laboratory								
Hg					3.1239		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Review.
					CY2006 Facility Total:	204.3025	2.9400	CY2006 Co-product: 5,880 lbs/yr.
					CY2007 Facility Total:	57.4138	2.2750	CY2007 Co-product: 4,550 lbs/yr.
					CY2008 Facility Total:	278.3220	2.6000	CY2008 Co-product: 5,200 lbs/yr.
					CY2009 Facility Total:	5.8995	1.5600	CY2009 Co-product: 3,120 lbs/yr.
					CY2010 Facility Total:	7.8188	1.4300	CY2010 Co-product: 2,860 lbs/yr.
					CY2011 Facility Total:	3.2198	1.6100	CY2011 Co-product: 3,220.00 lbs/yr.
					CY2012 Facility Total:	3.1464	0.0000	CY2012 Co-product: 0.00 lbs/yr.
					CY2013 Facility Total:	3.6439	0.0000	CY2013 Co-product: 0.00 lbs/yr.
					CY2014 Facility Total:	3.6439	0.0000	CY2014 Co-product: 0.00 lbs/yr.
					CY2015 Facility Total:	3.1239	0.0000	CY2015 Co-product: 0.00 lbs/yr.
					CY2016 Facility Total:	3.1239	0.0000	CY2016 Co-product: 0.00 lbs/yr.

Source: Rawhide Mining, LLC - Denton-Rawhide Mine (formerly Kennecott Rawhide Mining Company): AQOP AP1041-2892; OPTC AP1041-2975; MOPTC AP1041-2245								
System Description: Carbon Regeneration Kiln (S2.001/TU4.001)								
Hg	341.70	tpy	0.0000359	lbs/hr	0.2945	8,203	0.0000	Carbon Kiln emissions factor derived from 2016 M29 stack test.
System Description: Electro-winning Circuit (IA3.007/TU4.002)								
Hg	Not Reported	gals/yr	0.00000789	lbs/hr	0.0272	3,444	0.0000	Electro-winning Cells emissions factor derived from 2016 M29 stack test.
System Description: Refinery Induction Furnace (S2.004/TU4.003)								
Hg	62.00	tpy	0.000138	lbs/hr	0.0915	663	0.0000	Refinery Furnace emissions factor derived from 2016 M29 stack test.
System Description: Mercury Retort (S2.002)								
Hg	33.50	tpy	0.000022	lbs/hr	0.1137	5,170	0.0000	Retort emissions factor derived from 2016 M29 stack test.
System Description: Mercury Co-Product								
Hg					0.0000		0.0005	Facility-wide mercury co-product collected, no breakout by system provided.
System Description: Fire Assay Laboratory								
Hg					0.0143		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:		351.5928		0.0621	CY2006 Co-product: 124.20 lbs/yr.
			CY2007 Facility Total:		39.5645		0.0276	CY2007 Co-product: 55.20 lbs/yr.
			CY2008 Facility Total:		13.0908		0.0262	CY2008 Co-product: 52.40 lbs/yr.
			CY2009 Facility Total:		12.0029		0.0258	CY2009 Co-product: 51.60 lbs/yr.
			CY2010 Facility Total:		37.6433		0.0079	CY2010 Co-product: 15.80 lbs/yr.
			CY2011 Facility Total:		78.5131		0.0230	CY2011 Co-product: 46.00 lbs/yr.
			CY2012 Facility Total:		7.1176		0.0249	CY2012 Co-product: 49.80 lbs/yr.
			CY2013 Facility Total:		0.0743		0.1270	CY2013 Co-product: 254 lbs/yr.
			CY2014 Facility Total:		0.1924		0.0193	CY2014 Co-product: 38.60 lbs/yr.
			CY2015 Facility Total:		0.3959		0.0102	CY2015 Co-product: 20.40 lbs/yr.
			CY2016 Facility Total:		0.5412		0.0005	CY2016 Co-product: 1.04 lbs/yr.
Source: Hycroft Resources & Development, Inc. - Crofoot/Lewis Project: AQOP AP1041-0334.02; OPTC AP1041-2974; OPTC AP1041-3269; OPTC AP1041-3344; MOPTC AP1041-2255								
System Description: Mercury Retort #1 (TU4.001)								
Hg	Not Reported	tpy	0.0001	lbs/hr	0.7262	7,262	0.0000	Retort emissions factor derived from average of 2016 M29 stack tests.
System Description: Smelting Furnace #1 (TU4.002)								
Hg	Not Reported	tpy	0.0002	lbs/hr	1.3074	6,537	0.0000	Furnace emissions factor derived from average of 2016 M29 stack tests.
System Description: Mercury Retort #2 (TU4.003)								
Hg	Not Reported	tpy	0.000014	lbs/hr	0.1008	7,199	0.0000	Retort emissions factor derived from 2016 M29 stack test.
System Description: Mercury Retort #3 (TU4.004)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	System not yet constructed.
System Description: Mercury Retort #4 (TU4.005)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	System not yet constructed.
System Description: Mercury Retort #5 (TU4.006)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	System not yet constructed.
System Description: Smelting Furnace #2 (TU4.007)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	System not yet constructed.
System Description: Smelting Furnace #3 (TU4.008)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	System not yet constructed.
System Description: Mercury Co-Product								
Hg					0.0000		7.3750	Facility-wide mercury co-product collected, no breakout by system provided.
System Description: Assay Laboratory								
Hg					4.4797		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:		0.0000		0.0000	CY2006 Co-product: 0.00 lbs/yr.
			CY2007 Facility Total:		0.0000		0.0000	CY2007 Co-product: 0.00 lbs/yr.
			CY2008 Facility Total:		0.0000		0.0000	CY2008 Co-product: 0.00 lbs/yr.
			CY2009 Facility Total:		4.5299		0.8000	CY2009 Co-product: 1,600 lbs/yr.
			CY2010 Facility Total:		4.5219		4.2000	CY2010 Co-product: 8,400 lbs/yr.
			CY2011 Facility Total:		4.5242		23.0700	CY2011 Co-product: 46,147 lbs/yr.
			CY2012 Facility Total:		4.4784		34.0200	CY2012 Co-product: 68,047 lbs/yr.
			CY2013 Facility Total:		4.4959		27.6700	CY2013 Co-product: 53,340 lbs/yr.
			CY2014 Facility Total:		5.8421		56.9100	CY2014 Co-product: 113,820 lbs/yr.
			CY2015 Facility Total:		5.6891		35.7000	CY2015 Co-product: 71,400 lbs/yr.
			CY2016 Facility Total:		6.6141		7.3750	CY2016 Co-product: 14,750 lbs/yr.

Source: Klondex Aurora Mine, Inc. (formerly Carlin Resources, LLC/Waterton Global Minng/Antler Peak Gold/Metallic Ventures).: AQOP AP1041-3127; OPTC AP1041-2853; MOPTC AP1041-2248								
System Description: Carbon Regeneration Kiln, Solution Tanks & Electro-winning Circuit (TU4.001 - TU4.003 & TU4.006)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	System did not operate in 2016.
System Description: Mercury Retorts, Solution Tanks & Electro-winning Circuit (TU4.002 - TU4.006)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	System did not operate in 2016.
System Description: Dore Furnace, Solution Tanks & Electro-winning Circuit (TU4.002, TU4.003, TU4.006 & TU4.007)								
HG	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	System did not operate in 2016.
System Description: Mercury Co-Product								
Hg					0.0000		0.0000	Facility-wide mercury co-product collected, no breakout by system provided.
System Description: Assay Laboratory								
Hg					0.0076		0.0000	Potential to emit (PTE) of 0.0076 lbs/yr, not actual - see DM Technical Review.
					CY2006 Facility Total: 0.0000		0.0000	CY2006 Co-product: 0.00 lbs/yr.
					CY2007 Facility Total: 0.0000		0.0000	CY2007 Co-product: 0.00 lbs/yr.
					CY2008 Facility Total: 0.2838		0.0000	CY2008 Co-product: 0.00 lbs/yr.
					CY2009 Facility Total: 0.2838		0.0000	CY2009 Co-product: 0.00 lbs/yr.
					CY2010 Facility Total: 0.0222		0.0000	CY2010 Co-product: 0.00 lbs/yr.
					CY2011 Facility Total: 0.0022		0.0000	CY2011 Co-product: 0.00 lbs/yr.
					CY2012 Facility Total: 3.7066		0.0000	CY2012 Co-product: 0.00 lbs/yr.
					CY2013 Facility Total: 0.0276		0.0000	CY2013 Co-product: 0.00 lbs/yr.
					CY2014 Facility Total: 0.0076		0.0000	CY2014 Co-product: 0.00 lbs/yr.
					CY2015 Facility Total: 0.0000		0.0000	CY2015 Co-product: 0.00 lbs/yr.
					CY2016 Facility Total: 0.0076		0.0000	CY2016 Co-product: 0.00 lbs/yr.
Source: Coeur D'Alene Mining Corporation - Coeur Rochester Mine: AQOP AP1044-0063.02; MOPTC AP1041-2242								
System Description: Refinery Furnace (TU4.001)								
Hg	231.00	tpy	0.001515	lbs/hr	1.2771	843	0.0000	Refinery Furnace emissions factor derived from March 2016 M29 stack test.
System Description: Mercury Retorts (TU4.002 & TU4.003)								
Hg	416.00	tpy	0.0000118	lbs/hr	0.0753	6,384	0.0000	Retort emissions factor derived from March 2016 M29 stack test.
System Description: Mercury Co-Product								
Hg					0.0000		7.9000	Facility-wide mercury co-product collected, no breakout by system provided.
System Description: Assay Laboratory								
Hg					1.8805		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
					CY2006 Facility Total: 2.8872		16.1000	CY2006 Co-product: 32,200 lbs/yr.
					CY2007 Facility Total: 137.0958		15.4000	CY2007 Co-product: 30,800 lbs/yr.
					CY2008 Facility Total: 9.9144		15.6000	CY2008 Co-product: 31,200 lbs/yr.
					CY2009 Facility Total: 4.4097		10.7000	CY2009 Co-product: 21,400 lbs/yr.
					CY2010 Facility Total: 2.6426		12.3000	CY2010 Co-product: 24,600 lbs/yr.
					CY2011 Facility Total: 3.3523		11.2000	CY2011 Co-product: 22,400 lbs/yr.
					CY2012 Facility Total: 3.2552		20.4000	CY2012 Co-product: 40,800 lbs/yr.
					CY2013 Facility Total: 2.6378		14.5000	CY2013 Co-product: 29,000 lbs/yr.
					CY2014 Facility Total: 2.1938		13.2000	CY2014 Co-product: 26,400 lbs/yr.
					CY2015 Facility Total: 4.2967		10.4000	CY2015 Co-product: 20,800 lbs/yr.
					CY2016 Facility Total: 3.2330		7.9000	CY2016 Co-product: 15,800 lbs/yr.

Source: Newmont Mining Corporation - Lone Tree Mine: AQOP AP1041-3575; MOPTC AP1041-2251								
System Description: Electro-winning Cells (East Stack)								
Hg	0.00	gals/yr	0	lbs/hr	0.0000	0	0.0000	EW Cells were decommissioned throughout 2012.
System Description: Electro-winning Cells (West Stack)								
Hg	0.00	gals/yr	0	lbs/hr	0.0000	0	0.0000	EW Cells were decommissioned throughout 2012.
System Description: Electro-winning Cells (Scavenger Stack)								
Hg	0.00	gals/yr	0	lbs/hr	0.0000	0	0.0000	EW Cells were decommissioned throughout 2012.
System Description: Pregnant and Barren Solution Tanks								
Hg	0.00	tpy - carbon	0	lbs/hr	0.0000	0	0.0000	P/B Tanks were decommissioned throughout 2012.
System Description: Mercury Co-Product								
Hg					0.0000		0.0000	Facility-wide mercury co-product collected, no breakout by system provided.
System Description: Sample Room, Fire Assay Room, Wet Laboratory, LECO Laboratory, Met Laboratory								
Hg					1.8788		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:	622.1013			0.0000	CY2006 Co-product: 0.00 lbs/yr.
			CY2007 Facility Total:	148.0964			0.0000	CY2007 Co-product: 0.00 lbs/yr.
			CY2008 Facility Total:	67.1251			0.0000	CY2008 Co-product: 0.00 lbs/yr.
			CY2009 Facility Total:	7.2136			0.0000	CY2009 Co-product: 0.00 lbs/yr.
			CY2010 Facility Total:	3.0212			0.0000	CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:	1.8788			0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:	1.8788			0.0000	CY2012 Co-product: 0.00 lbs/yr.
			CY2013 Facility Total:	1.8788			0.0000	CY2013 Co-product: 0.00 lbs/yr.
			CY2014 Facility Total:	1.8788			0.0000	CY2014 Co-product: 0.00 lbs/yr.
			CY2015 Facility Total:	1.8788			0.0000	CY2015 Co-product: 0.00 lbs/yr.
			CY2016 Facility Total:	1.8788			0.0000	CY2016 Co-product: 0.00 lbs/yr.
Source: Barrick Cortez, Inc. - Cortez Hills and Pipeline Projects: AQOP AP1041-2141; MOPTC AP1041-2220								
System Description: Refinery Induction Furnace #1 (S2.002/TU4.003)								
Hg	33.50	tpy	0.0000382	lbs/hr	0.0120	314	0.0000	Furn. #1 ducted in-line with Retorts, EF derived from 2016 M29 stack test.
System Description: Refinery Induction Furnace #2 (S2.003/TU4.004)								
Hg	2.80	tpy	0.0000218	lbs/hr	0.0019	87	0.0000	Furn. #2 ducted in-line with Retorts, EF derived from 2016 M29 stack test.
System Description: Electric Carbon Reactivation Kiln #1 (S2.007/TU4.005)								
Hg	27.70	tpy	0.000614	lbs/hr	0.0348	57	0.0000	Carbon Kiln #1 emissions factor derived from 2016 M29 stack test.
System Description: Electric Carbon Reactivation Kiln #2 (S2.008/TU4.006)								
Hg	84.90	tpy	0.000569	lbs/hr	0.0979	172	0.0000	Carbon Kiln #2 emissions factor derived from 2016 M29 stack test.
System Description: East Electro-winning Circuit (IA1.096/TU4.001) including Pregnant and Barren Strip Solution Tanks (TU4.008 & TU4.009)								
Hg	35,025,093.50	gals/yr	0.0006	lbs/hr	3.4478	5,746	0.0000	East EW Circuit emissions factor derived from avg. of 2016 M29 stack tests.
System Description: West Electro-winning Circuit (IA1.097/TU4.002)								
Hg	17,660,419.90	gals/yr	0.0000721	lbs/hr	0.4026	5,584	0.0000	West EW Circuit emissions factor derived from 2016 M29 stack test.
System Description: Mercury Retorts (TU4.010 & TU4.011)								
Hg	37.30	tpy	0.0000382	lbs/hr	0.1314	3,440	0.0000	Retort emissions factor derived from 2016 M29 stack tests with both retorts operating. Retort #1 operated 1,820 hrs. & Retort #2 operated 1,620 hrs.
System Description: Mercury Co-Product								
Hg					0.0000		0.2600	Facility-wide mercury co-product collected, no breakout by system provided.
System Description: Assay Laboratory (Analytical Lab Building), Met Laboratory, Strip Circuit Area (Mill Building), Refinery Gold Sludge Drying Oven, Fire Assay Fusion Furnaces								
Hg					1.8841		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:	166.7059			0.1200	CY2006 Co-product: 240 lbs/yr.
			CY2007 Facility Total:	208.0466			0.3200	CY2007 Co-product: 640 lbs/yr.
			CY2008 Facility Total:	75.8638			0.0000	CY2008 Co-product: 0.00 lbs/yr.
			CY2009 Facility Total:	1.3905			0.0170	CY2009 Co-product: 34 lbs/yr.
			CY2010 Facility Total:	5.1862			0.0000	CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:	5.1815			0.7200	CY2011 Co-product: 1,441 lbs/yr.
			CY2012 Facility Total:	4.2156			1.2100	CY2012 Co-product: 2,412 lbs/yr.
			CY2013 Facility Total:	15.7637			2.2740	CY2013 Co-product: 4,458 lbs/yr.
			CY2014 Facility Total:	2.2159			0.4900	CY2014 Co-product: 980 lbs/yr.
			CY2015 Facility Total:	4.6010			1.1700	CY2015 Co-product: 2,340 lbs/yr.
			CY2016 Facility Total:	6.0125			0.2600	CY2016 Co-product: 524 lbs/yr.

Source: Florida Canyon Mining, Inc. - Florida Canyon Mine: AQOP AP1041-0106.02; MOPTC AP1041-2256								
System Description: Summit Valley Mercury Retort A (S2.003/TU4.004)								
Hg	Not Reported	tpy	0.0000167	lbs/hr	0.0006	370	0.0000	Retort A emissions factor derived from 2016 M29 stack tests.
System Description: Custom Mercury Retort B (S2.004/TU4.005)								
Hg	Not Reported	tpy	3.03E-07	lbs/hr	0.0002	554	0.0000	Retort B emissions factor derived from 2016 M29 stack tests.
System Description: Electro-winning Cell A (TU4.002/DM3.019)								
Hg	Not Reported	tpy	0.00273	lbs/hr	23.9148	8,760	0.0000	Electro-winning Cell A emissions factor derived from 2016 M29 stack tests.
System Description: Electro-winning Cell B (TU4.003/DM3.020)								
Hg	Not Reported	tpy	0.002665	lbs/hr	23.3454	8,760	0.0000	Electro-winning Cell B emissions factor derived from 2016 M29 stack tests.
System Description: Carbon Regeneration Kiln (S2.007/TU4.008)								
Hg	Not Reported	tpy	0.012636	lbs/hr	1.4721	117	0.0000	Carbon Kiln emissions factor derived from 2016 M29 stack tests.
System Description: Dore Furnace (S2.005/TU4.001/DM3.018)								
Hg		tpy	0.000563	lbs/hr	4.9319	8,760	0.0000	Dore Furnace emissions factor derived from 2016 M29 stack tests.
System Description: Pregnant Tank (TU4.006/DM3.016)								
Hg		hrs/yr		lbs/hr	0.0000		0.0000	Pregnant Tank moved to De Minimis Designation 12/17/09.
System Description: Barren Tank (TU4.007/DM3.017)								
Hg		hrs/yr		lbs/hr	0.0000		0.0000	Barren Tank moved to De Minimis Designation 12/17/09.
System Description: Mercury Co-Product								
Hg					0.0000		0.1200	Facility-wide mercury co-product collected, no breakout by system provided.
System Description: Assay Laboratory, Electro-winning Cells A & B, Pregnant & Barren Tanks and Dore Furnace.								
Hg					2.2457		0.0000	Calculated PTE = 2.9861 lbs/yr. EW Cells and Dore Furnace reported separately.
			CY2006 Facility Total:		440.7382		0.2264	CY2006 Co-product: 452.80 lbs/yr.
			CY2007 Facility Total:		19.0000		0.0072	CY2007 Co-product: 14.40 lbs/yr.
			CY2008 Facility Total:		162.3117		0.2875	CY2008 Co-product: 575 lbs/yr.
			CY2009 Facility Total:		49.6118		0.8120	CY2009 Co-product: 1,624 lbs/yr.
			CY2010 Facility Total:		111.8133		0.3090	CY2010 Co-product: 618 lbs/yr.
			CY2011 Facility Total:		51.7290		1.2700	CY2011 Co-product: 2,538 lbs/yr. (1,829.00 "liquid"; 709.00 sludge)
			CY2012 Facility Total:		8.2449		0.6300	CY2012 Co-product: 1,252 lbs/yr. (892.00 "liquid"; 360.00 sludge)
			CY2013 Facility Total:		4.2320		1.2150	CY2013 Co-product: 1,450 lbs/yr. (sludge)
			CY2014 Facility Total:		4.1346		0.1250	CY2014 Co-product: 250 lbs/yr. (sludge)
			CY2015 Facility Total:		33.4578		0.8960	CY2015 Co-product: 1,792 lbs/yr. (sludge)
			CY2016 Facility Total:		55.9107		0.1200	CY2016 Co-product: 244 lbs/yr.

Source: Round Mountain Gold Corporation - Smoky Valley/Gold Hill Common Operation: AQOP AP1041-0444.02; OPTC AP1041-2806; MOPTC AP1041-2250								
System Description: Round Mountain (Smoky Valley) Carbon Reactivation Kiln (S2.121 & S2.142/TU4.001)								
Hg	3,588.00	tpy	0.0000615	lbs/hr	0.4579	7,446	0.0000	Carbon Kiln emissions factor derived from 2016 M29 stack test. The Pregnant Strip Solution Tank and both Barren Strip Solution Tanks were removed from this system and added to the ADR Carbon Stripping Circuit April 16,2014.
System Description: Round Mountain (Smoky Valley) Electric Induction Furnace (S2.130/TU4.005)								
Hg	31.31	tpy	0.000709	lbs/hr	0.2354	332	0.0000	Furnace emissions factor derived from 2016 M29 stack test.
System Description: Gold Hill Carbon Reactivation Kiln (S2.157/TU4.006)								
Hg	1,263.00	tpy	3.89E-07	lbs/hr	0.0020	5,252	0.0000	Carbon Kiln emissions factor derived from average of 2016 M29 stack tests.
System Description: Gold Hill Carbon Stripping Circuit - Electro-winning Circuit & Pregnant/Barren Strip SolutionTanks (S2.158 - S2.160/TU4.007 - TU4.009)								
Hg	26,265,495.00	gals/yr	0.0000242	lbs/hr	0.2006	8,291	0.0000	Carbon Strip Circ. emissions factor derived from avg. of 2016 M29 stack tests.
System Description: Gold Hill Mercury Retort (S2.161/TU4.010)								
Hg	10.22	tpy	1.12E-07	lbs/hr	0.0002	1,910	0.0000	Retort emissions factor derived from average of 2016 M29 stack tests.
System Description: Gold Hill Smelting Furnace (S2.162/TU4.011)								
Hg	7.25	tpy	0.00000861	lbs/hr	0.0012	142	0.0000	Furnace emissions factor derived from average of 2016 M29 stack tests.
System Description: Smoky Valley ADR Carbon Stripping Circuit - Electro-winning Circuit & Pregnant/Barren (2) Strip SolutionTanks(S2.143/TU4.002 - TU4.004 & TU4.012)								
Hg	23,989,215.00	gals/yr	0.0005225	lbs/hr	4.5682	8,743	0.0000	Carbon Strip Circuit emissions factor derived from avg. of 2016 M29 stack tests.
System Description: Mercury Co-Product								
Hg					0.0000		0.6860	Facility-wide mercury co-product collected, no breakout by system provided.
System Description: RMG Refinery Electro-winning Vent & Ovens, Assay Laboratory Ovens.								
Hg					1.4110		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
							0.0085	CY2006 Co-product: 17 lbs/yr.
							0.0000	CY2007 Co-product: 0.00 lbs/yr.
							0.0000	CY2008 Co-product: 0.00 lbs/yr.
							0.0000	CY2009 Co-product: 0.00 lbs/yr.
							0.0000	CY2010 Co-product: 0.00 lbs/yr.
							0.0000	CY2011 Co-product: 0.00 lbs/yr.
							0.0000	CY2012 Co-product: 0.00 lbs/yr.
							0.3150	CY2013 Co-product: 629.90 lbs/yr.
							0.3450	CY2014 Co-product: 690 lbs/yr.
							0.2940	CY2015 Co-product: 588 lbs/yr.
							0.6860	CY2016 Co-product: 1372 lbs/yr.
Source: Ruby Hill Mining Company, LLC - Ruby Hill Mine (formerly Homestake Mining Company of California): AQOP AP1041-0713.01; MOPTC AP1041-2252								
System Description: Electric Carbon Regeneration Kiln (S2.019/TU4.001)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Carbon Kiln was decommissioned 04/25/11 and did not operate in 2016.
System Description: Electric Mercury Retort (S2.022/TU4.003)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Retort was decommissioned 04/25/11 and did not operate in 2016.
System Description: Electric Refinery Induction Furnace (S2.013/TU4.002)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Furnace was decommissioned 04/25/11 and did not operate in 2016.
System Description: Electro-winning Cells 1 & 2 (IA1.005/TU4.004) and Pregnant and Barren Strip Solution Tanks (TU4.005)								
Hg	0.00	gals/yr	0	lbs/hr	0.0000	0	0.0000	EW Circuit was decommissioned 04/25/11 and did not operate in 2016.
System Description: Assay Laboratory								
Hg					1.3818		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
							0.5000	CY2006 Co-product: 1,000 lbs/yr.
							0.3800	CY2007 Co-product: 760 lbs/yr.
							0.2400	CY2008 Co-product: 480 lbs/yr.
							0.1762	CY2009 Co-product: 352.40 lbs/yr.
							0.0000	CY2010 Co-product: 0.00 lbs/yr.
							0.0495	CY2011 Co-product: 99 lbs/yr.
							0.0000	CY2012 Co-product: 0.00 lbs/yr.
							0.0000	CY2013 Co-product: 0.00 lbs/yr.
							0.0000	CY2014 Co-product: 0.00 lbs/yr.
							0.0000	CY2015 Co-product: 0.00 lbs/yr.
							0.0000	CY2016 Co-product: 0.00 lbs/yr.

Source: Marigold Mining Company - Marigold Mine: AQOP AP1041-0158.02; MOPTC AP1041-2254								
System Description: Carbon Regeneration Kiln (S2.013A/TU4.001)								
Hg	1,044.00	tpy	0.0000275	lbs/hr	0.0113	4,110	0.0000	Carbon Kiln emissions factor derived from average of 2016 M29 stack tests.
System Description: Mercury Retort (S2.014/TU4.002)								
Hg	11.76	tpy	0.00217	lbs/hr	4.2858	1,975	0.0000	Retort emissions factor derived from average of 2016 M29 stack tests.
System Description: Tilting Crucible Furnace (S2.015/TU4.003)								
Hg	8.06	tpy	0.0127	lbs/hr	4.3688	344	0.0000	Furnace emissions factor derived from average of 2016 M29 stack tests.
System Description: Electro-winning Circuit (TU4.004)								
Hg	153,015.00	tpy	0.00217	lbs/hr				Electro-winning Circuit emissions factor derived from avg. of 2016 M29 stack tests. The Pregnant and Barren Strip Solution Tanks are vented to a common stack with the Electro-winning Circuit, Mercury Retort, and Crucible Furnace. Since the fluids circuit is not tested separately from the Retort and Furnace, the Retort result is used as a surrogate for the Electro-winning Circuit alone.
System Description: Pregnant Strip Solution Tank (TU4.005)								
Hg	See Above	tpy	See Above	lbs/hr				
System Description: Barren Strip Solution Tank (TU4.006)								
Hg	See Above	tpy	See Above	lbs/hr	19.0092	8,760	0.0000	
System Description: Mercury Co-Product								
Hg					0.0000		0.0000	Elemental mercury collected disposed of as hazardous waste, not co-product.
System Description: Assay Laboratory								
Hg					2.1072		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:		908.0610		0.1675	CY2006 Co-product: 335 lbs/yr.
			CY2007 Facility Total:		5.2255		0.2450	CY2007 Co-product: 490 lbs/yr.
			CY2008 Facility Total:		10.4883		0.5690	CY2008 Co-product: 1,138 lbs/yr.
			CY2009 Facility Total:		4.4540		0.8160	CY2009 Co-product: 1,632 lbs/yr.
			CY2010 Facility Total:		9.3695		1.0330	CY2010 Co-product: 2,066 lbs/yr.
			CY2011 Facility Total:		11.1707		1.0500	CY2011 Co-product: 2,100 lbs/yr.
			CY2012 Facility Total:		2.1159		1.4600	CY2012 Co-product: 2,927 lbs/yr.
			CY2013 Facility Total:		7.5577		0.4765	CY2013 Co-product: 953 lbs/yr.
			CY2014 Facility Total:		3.3689		0.0000	CY2014 Co-product: 0.00 lbs/yr.
			CY2015 Facility Total:		24.8525		0.0000	CY2015 Co-product: 0.00 lbs/yr.
			CY2016 Facility Total:		29.7823		0.0000	CY2016 Co-product: 0.00 lbs/yr.
Source: Borealis Mining Company: AQOP AP1041-2855; MOPTC AP1041-2228								
System Description: Deep Bed Carbon Scrubber: Carbon Regeneration Kiln (S2.003/TU4.001)								
Hg	72.37	tpy	0.0000733	lb/hr	0.0094	1,286	0.0000	Carbon Kiln emissions factor derived from average of 2016 M29 stack tests.
System Description: Deep Bed Carbon Scrubber: Mercury Retort (S2.004/TU4.002)								
Hg	1.06	tpy	0.00000467	lb/hr	0.0015	311	0.0000	Retort emissions factor derived from 2016 M29 stack test.
System Description: Deep Bed Carbon Scrubber: Smelting Furnace (2.005/TU4.003)								
Hg	0.95	tpy	0.00000371	lb/hr	0.0003	75	0.0000	Furnace emissions factor derived from average of 2016 M29 stack tests.
System Description: Deep Bed Carbon Scrubber: Solutions Circuit (S2.006 - S2.008/TU4.004 - TU4.006)								
Hg	1,490.12	1000Gal/Yr	0.00000694	lb/hr	0.0090	1,295	0.0000	Solutions Circuit emissions factor derived from 2016 M29 stack test.
System Description: Mercury Co-Product								
Hg					0.0000		0.0000	Facility-wide mercury co-product collected, no breakout by system provided.
			CY2006 Facility Total:		0.0000		0.0000	CY2006 Co-product: 0.00 lbs/yr.
			CY2007 Facility Total:		0.0000		0.0000	CY2007 Co-product: 0.00 lbs/yr.
			CY2008 Facility Total:		0.0000		0.0000	CY2008 Co-product: 0.00 lbs/yr.
			CY2009 Facility Total:		0.0000		0.0000	CY2009 Co-product: 0.00 lbs/yr.
			CY2010 Facility Total:		0.0000		0.0000	CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:		0.0000		0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:		12.0456		0.0000	CY2012 Co-product: 0.00 lbs/yr.
			CY2013 Facility Total:		0.0353		0.1640	CY2013 Co-product: 327.50 lbs/yr.
			CY2014 Facility Total:		0.0372		0.3510	CY2014 Co-product: 702 lbs/yr.
			CY2015 Facility Total:		9.4184		0.0000	CY2015 Co-product: 0.00 lbs/yr.
			CY2016 Facility Total:		0.0201		0.0000	CY2016 Co-product: 0.00 lbs/yr.

Source: Barrick Turquoise Ridge, Inc. - Getchell Mine: AQOP AP1041-0292.01; MOPTC AP1041-2249							
System Description: Assay/Met Laboratory							
Hg					4.6574		0.0000 Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:		10.6752		0.0000 CY2006 Co-product: 0.00 lbs/yr.
			CY2007 Facility Total:		4.9660		0.0000 CY2007 Co-product: 0.00 lbs/yr.
			CY2008 Facility Total:		4.9462		0.0000 CY2008 Co-product: 0.00 lbs/yr.
			CY2009 Facility Total:		4.9462		0.0000 CY2009 Co-product: 0.00 lbs/yr.
			CY2010 Facility Total:		4.9462		0.0000 CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:		4.9462		0.0000 CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:		4.9462		0.0000 CY2012 Co-product: 0.00 lbs/yr.
			CY2013 Facility Total:		4.9462		0.0000 CY2013 Co-product: 0.00 lbs/yr.
			CY2014 Facility Total:		4.7375		0.0000 CY2014 Co-product: 0.00 lbs/yr.
			CY2015 Facility Total:		4.6574		0.0000 CY2015 Co-product: 0.00 lbs/yr.
			CY2016 Facility Total:		4.6574		0.0000 CY2016 Co-product: 0.00 lbs/yr.
Source: United Mining Partners, LLC (formerly Noble Technologies Corp.): AQOP AP1041-3645; MOPTC AP1041-2701							
System Description: Furnaces (2 Drying, 1 Smelting)							
Hg					0.0272		0.0000 Potential to emit (PTE) of 0.02716 lbs/yr, not actual - see DM Technical Review.
			CY2010 Facility Total:		4.0026		0.0000 CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:		4.0026		0.0000 CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:		4.0026		0.0000 CY2012 Co-product: 0.00 lbs/yr.
			CY2013 Facility Total:		4.0026		0.0000 CY2013 Co-product: 0.00 lbs/yr.
			CY2014 Facility Total:		4.0026		0.0000 CY2014 Co-product: 0.00 lbs/yr.
			CY2015 Facility Total:		0.0000		0.0000 CY2015 Co-product: 0.00 lbs/yr.
			CY2016 Facility Total:		0.0272		0.0000 CY2016 Co-product: 0.00 lbs/yr.
Source: GRP Pan, LLC (formerly Midway Gold US, Inc.): AQOP AP1041-3301; MOPTC AP1041-3302							
System Description: Carbon Kiln (S2.006/TU4.001)							
Hg	203.00	tpy	0.0000081	lbs/hr	0.0183	2,262	0.0000 Carbon Kiln emissions factor derived from 2016 M29 stack test.
System Description: Mercury Retort (S2.008/TU4.002)							
Hg	1,348.00	lbs/yr	4.06E-08	lbs/hr	0.0000	501	0.0000 Retort emissions factor derived from 2016 M29 stack test.
System Description: Melt Furnace (S2.010/TU4.003)							
Hg	776.00	lbs/yr	0.00000554	lbs/hr	0.0005	96	0.0000 Furnace emissions factor derived from 2016 M29 stack test.
System Description: Carbon Stripping/Electro-winning Cells & Barren Tanks (S2.011/TU4.004 - TU4.006)							
Hg	250.00	tpy	0.00000147	lbs/hr	0.0023	1,537	0.0000 Carbon Stripping Circuit emissions factor derived from 2016 M29 stack test.
System Description: Mercury Co-Product							
Hg					0.0000		0.4900 Facility-wide mercury co-product collected, no breakout by system provided.
System Description: Assay Laboratory							
Hg					2.4700		0.0000 Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2013 Facility Total:		0.0000		0.0000 CY2013 Co-product: 0.00 lbs/yr.
			CY2014 Facility Total:		0.0000		0.0000 CY2014 Co-product: 0.00 lbs/yr.
			CY2015 Facility Total:		2.5131		0.3200 CY2015 Co-product: 637.32 lbs/yr.
			CY2016 Facility Total:		2.4911		0.4900 CY2016 Co-product: 970.07 lbs/yr.
Source: Gold Acquisition Corp. - Relief Canyon Mine: AQOP AP1041-2441; OPTC AP1041-3652; MOPTC AP1041-3585							
System Description: Mercury Retort (S2.009B/TU4.001)							
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000 Mercury Retort did not operate in 2016.
System Description: Carbon Regeneration Kiln (S2.011B/TU4.002)							
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000 Carbon Regeneration Kiln did not operate in 2016.
System Description: Electro-winning Cells & Barren Tank (S2.012 - S2.015/TU4.003 - TU4.006)							
Hg	0.00	gal/yr	0	lbs/hr	0.0000	0	0.0000 EW Cells & Barren Tank did not operate in 2016.
System Description: Melt Furnace (S2.010B/TU4.007)							
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000 Melt Furnace did not operate in 2016.
System Description: Assay Laboratory							
Hg					0.3400		0.0000 Potential to emit (PTE) of 0.34 lbs/yr, not actual - see DM Tech. Review
			CY2016 Facility Total:		0.3400		0.0000 CY2016 Co-product: 0.00 lbs/yr.
			CY2016 Facility Total:		0.3400		0.0000 CY2016 Co-product: 0.00 lbs/yr.

Source: Newmont Mining Corporation - Long Canyon Project: AQOP AP1041-3586; MOPTC AP1041-3833								
System Description: Atomic Adsorption Spectrometer								
Hg				0.0000		0.0000	Potential to emit (PTE) of 0.00000346 lbs/yr, not actual - see DM Tech. Review	
				CY2016 Facility Total:	0.0000	0.0000	CY2016 Co-product: 0.00 lbs/yr.	
				CY2016 Facility Total:	0.0000	0.0000	CY2016 Co-product: 0.00 lbs/yr.	
Source: Osgood Mining Company, LLC (formerly ATNA Resources, Inc.): AQOP AP1041-3086; MOPTC AP1041-3089								
System Description: Assay Laboratory								
Hg				0.0000		0.0000	Potential to emit (PTE) of 2.4156 lbs/yr, not actual - see DM Technical Review	
				CY2013 Facility Total:	2.4156	0.0000	CY2013 Co-product: 0.00 lbs/yr.	
				CY2014 Facility Total:	2.4156	0.0000	CY2014 Co-product: 0.00 lbs/yr.	
				CY2015 Facility Total:	2.4156	0.0000	CY2015 Co-product: 0.00 lbs/yr.	
				CY2016 Facility Total:	0.0000	0.0000	CY2016 Co-product: 0.00 lbs/yr.	
Source: Tonkin Springs, LLC: AQOP AP1041-0482.03; MOPTC AP1041-2726								
System Description: Assay Laboratory (2 Grieve Drying Ovens)								
Hg				4.9200		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.	
				CY2010 Facility Total:	4.9200	0.0000	CY2010 Co-product: 0.00 lbs/yr.	
				CY2011 Facility Total:	4.9200	0.0000	CY2011 Co-product: 0.00 lbs/yr.	
				CY2012 Facility Total:	4.9200	0.0000	CY2012 Co-product: 0.00 lbs/yr.	
				CY2013 Facility Total:	4.9200	0.0000	CY2013 Co-product: 0.00 lbs/yr.	
				CY2014 Facility Total:	4.9200	0.0000	CY2014 Co-product: 0.00 lbs/yr.	
				CY2015 Facility Total:	4.9200	0.0000	CY2015 Co-product: 0.00 lbs/yr.	
				CY2016 Facility Total:	4.9200	0.0000	CY2016 Co-product: 0.00 lbs/yr.	
Source: Mt. Hamilton, LLC: AQOP AP1041-3500; MOPTC AP1041-3520								
System Description: Mercury Retort (S2.003/TU4.001)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Mercury Retort did not operate, not yet constructed.
System Description: ADR Plant: Carbon Kiln (S2.004B/TU4.002)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Carbon Regeneration Kiln did not operate, not yet constructed.
System Description: ADR Plant: Smelting Furnace (S2.005/TU4.003)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Smelting Furnace did not operate, not yet constructed.
System Description: ADR Plant: Electro-winning Cells and P/B Tanks (S2.006 - S2.010/TU4.004 - TU4.008)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	EW Cells and P/B Tanks did not operate, not yet constructed.
System Description: Mercury Co-Product								
Hg					0.0000		0.0000	Facility-wide mercury co-product collected - Retort.
System Description: Assay Laboratory (14 Thermal Units)								
Hg					0.0000		0.0000	Potential to emit (PTE) of 4.11 lbs/yr, not actual - see DM Technical Review.
				CY2015 Facility Total:	0.0000	0.0000	CY2015 Co-product: 0.00 lbs/yr.	
				CY2016 Facility Total:	0.0000	0.0000	CY2016 Co-product: 0.00 lbs/yr.	
Source: WK Mining (USA) LTD.: AQOP AP1041-3670; OPTC AP1041-3668; MOPTC AP1041-3669								
System Description: ADR Plant: Mercury Retort (S2.003/TU4.001)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Mercury Retort did not operate, not yet constructed.
System Description: ADR Plant: Smelting Furnace (S2.004/TU4.002)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Smelting Furnace did not operate, not yet constructed.
System Description: ADR Plant: Carbon Regeneration Kiln (S2.005/TU4.003)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Smelting Furnace did not operate, not yet constructed.
System Description: ADR Plant: Electro-winning Cells and P/B Tanks (S2.006 - S2.009/TU4.004 - TU4.007)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	EW Cells and P/B Tanks did not operate, not yet constructed.
System Description: Mercury Co-Product								
Hg					0.0000		0.0000	Facility-wide mercury co-product collected.
System Description: De Minimis Designation								
Hg					0.0000		0.0000	No DM Designation currently issued.
				CY2016 Facility Total:	0.0000	0.0000	CY2016 Co-product: 0.00 lbs/yr.	
				CY2016 Facility Total:	0.0000	0.0000	CY2016 Co-product: 0.00 lbs/yr.	

Source: Comstock Mining, LLC (formerly Plum Mining Company, LLC): AQOP AP1041-2761; MOPTC AP1041-2690								
System Description: Mercury Retort (S2.025/TU4.001)								
Hg	32.52	tpy	0.0000568	lbs/hr	0.1975	3,477	0.0000	Retort emissions factor derived from 2015 M29 stack test.
System Description: Refinery Furnace (S2.026 & S2.026.1/TU4.002)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Furnace shut down early 2014, unknown where precipitate is being smelted.
System Description: Mercury Co-Product								
Hg					0.0000		0.0000	Facility-wide mercury co-product collected - Retort.
System Description: Assay Laboratory (12 Thermal Units)								
Hg					0.0309		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2011 Facility Total:		0.0309		0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:		0.2755		0.0000	CY2012 Co-product: 0.00 lbs/yr.
			CY2013 Facility Total:		0.9812		0.0003	CY2013 Co-product: 0.583 lbs/yr.
			CY2014 Facility Total:		0.0708		0.0070	CY2014 Co-product: 14 lbs/yr.
			CY2015 Facility Total:		0.2257		0.0000	CY2015 Co-product: 0.00 lbs/yr.
			CY2016 Facility Total:		0.2284		0.0000	CY2016 Co-product: 0.00 lbs/yr.
Source: Mineral Ridge Gold, LLC: AQOP AP1041-2733; MOPTC AP1041-2222								
System Description: Assay Laboratory (9 Thermal Units)								
Hg					2.9851		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2011 Facility Total:		2.1256		0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:		2.1256		0.0000	CY2012 Co-product: 0.00 lbs/yr.
			CY2013 Facility Total:		2.9851		0.0000	CY2013 Co-product: 0.00 lbs/yr.
			CY2014 Facility Total:		2.9851		0.0000	CY2014 Co-product: 0.00 lbs/yr.
			CY2015 Facility Total:		2.9851		0.0000	CY2015 Co-product: 0.00 lbs/yr.
			CY2016 Facility Total:		2.9851		0.0000	CY2016 Co-product: 0.00 lbs/yr.
Source: Aurum Joint Venture, LLC: AQOP AP1041-2511; MOPTC AP1041-2638 - Permits terminated for non-payment of FY2016 annual fees.								
System Description:								
Hg					0.0000		0.0000	
			CY2009 Facility Total:		2.7962		0.0000	CY2009 Co-product: 0.00 lbs/yr.
			CY2010 Facility Total:		2.7962		0.0000	CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:		2.7982		0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:		2.7982		0.0000	CY2012 Co-product: 0.00 lbs/yr.
			CY2013 Facility Total:		2.7982		0.0000	CY2013 Co-product: 0.00 lbs/yr.
			CY2014 Facility Total:		2.7982		0.0000	CY2014 Co-product: 0.00 lbs/yr.
			CY2015 Facility Total:		0.0000		0.0000	Permit terminated.
			CY2016 Facility Total:		0.0000		0.0000	Permit terminated.
Source: Goldwedge, LLC - Goldwedge Mine (formerly Manhattan Mining Company): AQOP AP1041-1457; MOPTC AP1041-2303								
System Description: Assay Laboratory & Dore Smelting Furnace								
Hg					0.3624		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:		0.0000		0.0000	CY2006 Co-product: 0.00 lbs/yr.
			CY2007 Facility Total:		4.1040		0.0000	CY2007 Co-product: 0.00 lbs/yr.
			CY2008 Facility Total:		4.1040		0.0000	CY2008 Co-product: 0.00 lbs/yr.
			CY2009 Facility Total:		4.1040		0.0000	CY2009 Co-product: 0.00 lbs/yr.
			CY2010 Facility Total:		4.1040		0.0000	CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:		4.1040		0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:		4.4661		0.0000	CY2012 Co-product: 0.00 lbs/yr.
			CY2013 Facility Total:		4.4661		0.0000	CY2013 Co-product: 0.00 lbs/yr.
			CY2014 Facility Total:		4.4661		0.0000	CY2014 Co-product: 0.00 lbs/yr.
			CY2015 Facility Total:		0.3624		0.0000	CY2015 Co-product: 0.00 lbs/yr.
			CY2016 Facility Total:		0.3624		0.0000	CY2016 Co-product: 0.00 lbs/yr.

Source: Newmont Mining Corporation - Phoenix Mine: AQOP AP1041-0220.03; MOPTC AP1041-2247								
System Description: Electric Carbon Regeneration Kiln (S2.002/TU4.001)								
Hg	2,153.00	tpy	0.0000129	lbs/hr	0.0463	3,588	0.0000	Carbon Kiln emissions factor derived from 2016 M29 stack test.
System Description: Mercury Retort (S2.014/TU4.002)								
Hg	6.00	tpy	5.92E-07	lbs/hr	0.0002	330	0.0000	Retort emissions factor derived from July 2016 M29 stack test.
System Description: Mercury Co-Product								
Hg					0.0000		0.0000	Facility-wide mercury co-product collected - Retort.
System Description: Pregnant & Barren Tanks, Electro-winning Cells, Drying Oven and 2 AA Units. SXEW EW Cells and Metallurgical Lab DM status pending determination.								
Hg					0.5773		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:		2.3061		0.0000	CY2006 Co-product: 0.00 lbs/yr.
			CY2007 Facility Total:		0.4579		0.0000	CY2007 Co-product: 0.00 lbs/yr.
			CY2008 Facility Total:		0.8053		0.0000	CY2008 Co-product: 0.00 lbs/yr.
			CY2009 Facility Total:		1.3102		0.0000	CY2009 Co-product: 0.00 lbs/yr.
			CY2010 Facility Total:		0.3835		0.0000	CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:		0.3749		0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:		0.3724		0.0000	CY2012 Co-product: 0.00 lbs/yr.
			CY2013 Facility Total:		0.5415		0.0370	CY2013 Co-product: 60 lbs/yr.
			CY2014 Facility Total:		0.5799		0.0000	CY2014 Co-product: 0.00 lbs/yr.
			CY2015 Facility Total:		0.5814		0.0000	CY2015 Co-product: 0.00 lbs/yr.
			CY2016 Facility Total:		0.6238		0.0000	CY2016 Co-product: 0.00 lbs/yr.

Source: Barrick Goldstrike Mines, Inc.: AQOP AP1041-0739.01; OPTC AP1041-2805; MOPTC AP1041-2221								
System Description: North Roaster Mill Circuit #1 Air Pre-Heater and Dry Grinding Process (S2.204 & S2.205.01 - S2.205.12/TU4.001)								
Hg	2,661,375.00	tpy	0.00102406	lbs/hr	8.14742136	7,956	0.0000	Mill Circuit #1 emissions factor derived from 2016 M29 stack test.
System Description: South Roaster Mill Circuit #2 Air Pre-Heater and Dry Grinding Process (S2.206 & S2.207.01 - S2.207.12/TU4.002)								
Hg	2,461,069.00	tpy	0.001539	lbs/hr	12.185802	7,918	0.0000	Mill Circuit #2 emissions factor derived from 2016 M29 stack test.
System Description: Roasters #1 & #2 (S2.209.1 & S2.209.2/TU4.003 & TU4.004)								
Hg	5,695,260.00	tpy	0.019832	lbs/hr	147.708736	7,448	0.0000	Roaster Circuit emissions factor derived from 2016 M29 stack test. Testing was conducted during dual Roaster operations. Annual hours operated is the average of individual Roaster operations. Roaster #1 operated 7,463 hrs/yr, Roaster #2 operated 7,433 hrs/yr.
System Description: North Roaster Circuit #1 Quenching Process (S2.210/TU4.005)								
Hg	2,968,235.00	tpy	0.002388	lbs/hr	17.821644	7,463	0.0000	Quench Circuit #1 emissions factor derived from 2016 M29 stack test.
System Description: South Roaster Circuit #2 Quenching Process (S2.211/TU4.006)								
Hg	2,727,016.00	tpy	0.003483	lbs/hr	25.889139	7,433	0.0000	Quench Circuit #2 emissions factor derived from 2016 M29 stack test.
System Description: Analytical Assay Laboratory (S2.051/TU4.007)								
Hg	44.00	tpy	0.00026	lbs/hr	2.2825	8,779	0.0000	Assay Lab emissions factor derived from 2016 M29 stack test.
System Description: Carbon Reactivation Kiln (S2.004.1/TU4.008)								
Hg	4,709.00	tpy	0.0000405	lbs/hr	0.1631	4,027	0.0000	Carbon Kiln emissions factor derived from 2016 M29 stack test.
System Description: Pregnant & Barren Strip Solution Tanks - Circuit A (TU4.009 & TU4.011)								
Hg	Not Reported	gals/yr	0	lbs/hr	0.0000	0	0.0000	P/B Tanks A emissions reported in conjunction with Carbon Reactivation Kiln.
System Description: Pregnant & Barren Strip Solution Tanks - Circuit B (TU4.010 & TU4.012)								
Hg	Not Reported	gals/yr	0	lbs/hr	0.0000	0	0.0000	P/B Tanks B emissions reported in conjunction with Carbon Reactivation Kiln.
System Description: Autoclave #1 (S2.015/TU4.013)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Acidic Operation Autoclave #1 did not operate in 2016.
System Description: Autoclaves #2 & 3 (S2.016 & S2.017/TU4.014 & TU4.015)								
Hg	1,774,461.00	tpy	0.00454	lbs/hr	32.5064	7,160	0.0000	Acidic Operation Autoclaves #2 & 3 emissions factor derived from 2016 M29 stack tests. Testing was conducted during dual Autoclave operations. Annual hours operated is the average of individual Autoclave operations. Autoclave #2 operated 7,483 hrs/yr, Autoclave #3 operated 6,836 hrs/yr.
System Description: Autoclaves #4 - 6 (S2.018 - S2.020/TU4.016 - TU4.018)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Acidic Operation Annual Emissions Reporting Form does not specify under which operating scenario testing was conducted, or whether dual scenario operations were undertaken. Therefore, all hours, throughput, and emissions are reported under Alkaline mode.
System Description: Autoclaves #4 - 6 (S2.018 - S2.020/TU4.016 - TU4.018)								
Hg	2,192,231.00	tpy	0.000175	lbs/hr	1.1914	6,808	0.0000	Alkaline Operation Autoclaves #4 - 6 emissions factor derived from 2016 M29 stack test. Testing was conducted during simultaneous operations. Annual hours operated is the average of individual Autoclave operations. Autoclave #4 operated 6,212 hrs/yr; #5 operated 6,729 hrs/yr; and #6 operated 7,484 hrs/yr.

System Description: Mercury Retort #1 (S2.009/TU4.019)								
Hg	42.00	tpy	4.07E-07	lbs/hr	0.0011	2,714	0.0000	Retort #1 emissions factor derived from 2016 M29 stack test.
System Description: Mercury Retort #2 (S2.010/TU4.020)								
Hg	40.00	tpy	9.49E-08	lbs/hr	0.0003	2,761	0.0000	Retort#2 emissions factor derived from 2016 M29 stack test.
System Description: Mercury Retort #3 (S2.011/TU4.021)								
Hg	44.00	tpy	4.23E-07	lbs/hr	0.0012	2,944	0.0000	Retort #3 emissions factor derived from 2016 M29 stack test.
System Description: Mercury Retort #4 (S2.341/TU4.025)								
Hg	6.00	tpy	7.16E-07	lbs/hr	0.0005	703	0.0000	Retort #4 emissions factor derived from 2016 M29 stack test.
System Description: East & West Refinery Furnaces & Electro-winning Cells combined vented through a common carbon filter and stack (S2.013 & S2.014/TU4.022 & TU4.023)								
Hg	112.00	tpy	0.0201	lbs/hr	16.7232	832	0.0000	Furnaces/s/EW Cells emissions factor derived from 2016 M29 stack test. Testing was conducted during dual Furnace and EW Cell operations. Annual hours operated is the average of individual Furnace operations. East Furnace (TU4.022) operated 787 hrs/yr; West Furnace (TU4.023) operated 877 hrs/yr.
System Description: Electro-winning Cells only (TU4.024)								
Hg	Not Reported	gals/yr	0.00019	lbs/hr	1.4068	7,404	0.0000	EW Cells emissions factor derived from 2016 M29 stack test while the Furnaces were not operating. Total EW Cell operating hours were 8,236 hrs/yr. Combined Furnace/EW Cell operating hours of 832 hrs/yr. were subtracted from total hours operated to arrive at 7,404 hours of EW Cell operations only.
System Description: Resin-In-Leach (RIL) Elution Circuit Regeneration Tanks (S2.333.1 - S2.333.8/TU4.026 - TU4.029)								
Hg	Not Reported	gals/yr	0.0000877	lbs/hr	0.5930	6,762	0.0000	RIL Elution Circuit Regeneration Tanks commenced operations 11/18/14. RIL Regen. Tanks emissions factor derived from March 2016 M29 stack test.
System Description: Resin-In-Leach (RIL) Electro-winning Circuit & Pregnant/Barren Tanks (S2.342.1 - S2.342.3/TU4.030 - TU4.032)								
Hg	Not Reported	gals/yr	0.0000819	lbs/hr	0.6286	7,675	0.0000	RIL EW Circuit & P/B Tanks commenced operations 11/24/14. RIL EW Circuit emissions factor derived from average of 2016 M29 stack tests.
System Description: Mercury Co-Product								
Hg					0.0000		126.6000	Facility-wide mercury co-product collected, no breakout by system provided.
System Description: Assay, Mill, Mill Met, Autoclave, Autoclave Met and Roaster Pumphouse Laboratories, Strip Circuit Area and Ore Fines Fee System.								
Hg					4.5800		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:		616.7650		98.5500	CY2006 Co-product: 197,100 lbs/yr.
			CY2007 Facility Total:		708.6590		58.6300	CY2007 Co-product: 117,260 lbs/yr.
			CY2008 Facility Total:		166.0557		87.3300	CY2008 Co-product: 134,660 lbs/yr.
			CY2009 Facility Total:		369.7831		61.8730	CY2009 Co-product: 123,746 lbs/yr.
			CY2010 Facility Total:		266.9336		60.1080	CY2010 Co-product: 120,216 lbs/yr.
			CY2011 Facility Total:		630.5519		59.9200	CY2011 Co-product: 119,840 lbs/yr.
			CY2012 Facility Total:		334.9836		44.4100	CY2012 Co-product: 88,820 lbs/yr.
			CY2013 Facility Total:		386.0257		50.6700	CY2013 Co-product: 101,340 lbs/yr.
			CY2014 Facility Total:		227.3012		53.4000	CY2014 Co-product: 106,800 lbs/yr.
			CY2015 Facility Total:		273.8005		66.4800	CY2015 Co-product: 132,960 lbs/yr.
			CY2016 Facility Total:		271.8309		126.6000	CY2016 Co-product: 253,200 lbs/yr. No calomel/elemental breakout provided.

CY 2016 Cumulative Totals		
Process Emissions (lbs/yr)		Co-Product (tpy)
696.68		164.35
CY 2016 process emissions were solely derived using one consistent FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy.		
Co-product: 328,700 lbs/yr		

CY 2015 Cumulative Totals		
Process Emissions (lbs/yr)		Co-Product (tpy)
688.12		131.17
CY 2015 process emissions were solely derived using one consistent FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy.		
Co-product: 262,340 lbs/yr		

CY 2014 Cumulative Totals		
Process Emissions (lbs/yr)		Co-Product (tpy)
484.21		145.12

CY 2014 process emissions were solely derived using one consistent FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy.
Co-product: 290,240 lbs/yr

10.0000		
Process Emissions (lbs/yr)		Co-Product (tpy)
748.63		111.57

FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy. In some instances, 2012 test results were used due to invalidated 2013 test results.
Co-product: 223,140 lbs/yr

CY 2012 Cumulative Totals		
Process Emissions (lbs/yr)		Co-Product (tpy)
1,393.42		115.95

CY 2012 process emissions were solely derived using one consistent FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy.
Co-product: 231,900 lbs/yr

CY 2010 Cumulative Totals		
Process Emissions (lbs/yr)		Co-Product (tpy)
1,607.96		106.77

CY 2011 process emissions were solely derived using one consistent FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy.
Co-product: 213,540 lbs/yr

CY 2010 Cumulative Totals		
Process Emissions (lbs/yr)		Co-Product (tpy)
1,134.15		101.59

CY 2010 process emissions were solely derived using one consistent FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy.
Co-product: 203,180 lbs/yr

Note: The total value is lower than actual industry-wide emissions due to a few thermal units which were unable to test in the reporting year and the absence of 2009 test data for Barrick Goldstrike's autoclaves under alkaline operating conditions. See 2009 Report for details.



CY 2009 Cumulative Totals			CY 2009 process emissions were solely derived using one consistent FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy. In general, testing went much better in 2009 than in 2008 with far fewer testing irregularities or instances where test results were invalidated. Co-product: 180,360 lbs/yr
Process Emissions lbs/yr		Co-Product tpy	
1,336.46		90.18	
CY 2008 Cumulative Totals			CY 2008 process emissions were largely derived using one consistent FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy. Some facilities had entire testing events, or in some cases just one or more runs of a test event, invalidated due to irregularities in testing protocol, poor sample handling procedures or laboratory errors. Yukon-Nevada Corporation - Jeritt Canyon Mine (formerly Queenstake Resources) did not test in 2008 due to the temporary NDEP ordered shutdown of the facility. Co-product: 205,860 lbs/yr
Process Emissions lbs/yr		Co-Product tpy	
3,165.90		102.93	
CY 2007 Cumulative Totals			CY 2007 process emissions were largely derived using one consistent FRM testing methodology (Method 29) with scattered M101A and OHM results used in lieu of M29 due to test schedule conflicts/logistics issues. Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy. Co-product: 195,360 lbs/yr
Process Emissions lbs/yr		Co-Product tpy	
4,764.52		97.68	
CY 2006 Cumulative Totals			CY 2006 process emissions and co-product values were accepted "as submitted" due to variability in testing methodology, emission calculation methods and/or the lack of current FRM test results. Co-product: 266,520 lbs/yr
Process Emissions lbs/yr		Co-Product tpy	
4,468.15		133.26	